

CLAIMS

1. A method for recovering fluorescent material from faulty glass bodies (1) of discharge lamps, said glass body (1) having a glass envelope and a coating of fluorescent material including binding material on the surface of the glass envelope, said method comprising the steps of breaking the faulty glass bodies (1) in a crusher; separating a remaining fraction forming a reusable waste from the broken scrap including glass particles and fluorescent material particles by sieving (15); treating of the remaining fraction by heat for removing the binding material from the fluorescent material; separating the fluorescent material from the surface of the glass particles in a liquid by washing (19); and obtaining a reusable fluorescent material from the liquid suspension by means of at least one sedimentary deposition (21).

2. The method of claim 1 in which the crusher has press rollers (23, 25) and the distance between the press rollers (23, 25) is equal to $0,6D - 0,9D$, where D is the diameter of the glass envelope.

3. The method of claim 1 in which the crusher has press rollers (23, 25) and the distance between the press rollers (23, 25) is adjustable.

4. The method of claim 1 in which the mesh size of the sieve used for separating the fraction forming a reusable waste is between 3.0 and 3.5 millimeters.

5. The method of claim 1 in which the fraction remaining after sieving (15) is treated by heat at a temperature of 500-520 °C.

6. The method of claim 1 in which the fluorescent material is separated from the surface of the glass particles by ultrasonic washing (19).

7. The method of claim 1 in which obtaining the reusable fluorescent material from the liquid suspension comprises the steps of drawing off the liquid after the first sedimentary deposition (21); and filling up the liquid, depositing, drawing off the liquid repeatedly for removing dirt remaining on the surface of the fluorescent material.
8. The method of claim 1 in which the liquid used for separating the fluorescent material from the surface of the glass particles is water.
9. A method for recovering fluorescent material from faulty glass bodies (1) of discharge lamps, said glass body (1) having a glass envelope and a coating (9) of fluorescent material on the surface of the glass envelope, said method comprising the steps of breaking the faulty glass bodies (1) in a crusher; removing all metallic component parts if present in the glass bodies (1) by means of electromagnetic separation (13); separating a remaining fraction forming a reusable waste from the broken scrap including glass particles and fluorescent material particles by sieving (15); separating the fluorescent material from the surface of the glass particles in a liquid by washing (19); and obtaining a reusable fluorescent material from the liquid suspension by means of at least one sedimentary deposition (21).